washplus

Supportive Environments for Healthy Communities

Compendium of WASHplus Tools and Resources to Facilitate WASH and Nutrition Integration

AN INTRODUCTION

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USAID

FROM THE AMERICAN PEOPLE

BACKGROUND

Undernutrition is the underlying cause of 45 percent of child deaths each year.[i] Despite targeted and comprehensive nutrition-specific interventions, the persistent presence of undernutrition globally has caused a renewed focus on underlying causes that go beyond lack of nutrients.[ii] Undernutrition is not just lack of food. Three factors are important for adequate nutrition:

- Access to food
- Maternal and child care practices
- Access to water, sanitation, and hygiene (WASH) to prevent diarrhea

Other factors can also inhibit a child's access to food—poverty, discrimination, and political marginalization, to name a few.

Inadequate access to clean water and unsafe sanitation and hygiene practices increase the risk of severe infectious diseases that can contribute to undernutrition.[iii] New research is underway to further document and expand the evidence base for the connection between water, sanitation, and hygiene (WASH) and undernutrition. Existing research suggests three key pathways by which lack of WASH access and practice contribute to undernutrition.[iv]

1. Repeated bouts of diarrhea. A vicious cycle exists between diarrhea and undernutrition: children with diarrhea eat less and are less able to absorb the nutrients from their food; malnourished children are more susceptible to diarrhea when exposed to fecal material from their environment.

2. Intestinal worm infection and malaria. Poor environmental hygiene, including open defecation, propagates the vectors for both intestinal worms and malaria. Worms can affect nutritional status by competing for nutrients and inducing intestinal bleeding, and like malaria, can cause frequent anemia and diarrhea.

3. Environmental enteric dysfunction hypothesis. Environmental enteric dysfunction (EED), also called environmental enteropathy, is a chronic disease caused by constant fecal-oral contamination. The intestinal villi flatten, thus reducing their capacity for nutrient absorption, and the small intestinal lining becomes chronically inflamed. In addition, EED is marked by increased gut permeability leading to a disturbed gut immune function. Thus, it is hypothesized that a body experiencing EED cannot absorb nutrients because it is too busy fighting off diseases.[v] EED may help explain why purely nutritional interventions have failed to reduce undernutrition in many contexts.[vi] [vii]

Development programming often focuses on a single issue, such as WASH or nutrition, to target resources and maximize returns on investments that can be more directly measured by defined goals, objectives, and single-focus indicators. However, this type of programming does not foster solutions to address the complex problems faced by the poor and vulnerable, and often promotes competition for scarce funding resources. Horizontal, integrated programming provides a more comprehensive approach that mirrors people's lives. However, integrated

programming can make it difficult to measure and demonstrate results, so donors are often reluctant to support such integration.

WASHPLUS APPROACH TO WASH–NUTRITION INTEGRATION

Since 2010, the USAID-funded WASHplus project has been engaged both at the global and country levels in stimulating the discussion and improving the evidence base around integrating WASH into nutrition programming, sharing experiences and approaches to integrating the two sectors. WASH interventions help reduce undernutrition by expanding the development community's focus to include both intermediate and underlying causes of malnutrition. WASH is now squarely embedded into USAID's Multi-Sectoral Nutrition Strategy 2014–2025, and nutrition is a theme of the Agency's Water and Development Strategy 2013–2018.
WASHplus developed programming guidance through our global- and country-level work. At the country level, the entry points were sectoral, systemic, and/or physical. In prior USAID-funded WASH projects, bringing sectors such as WASH and nutrition together was never routine, but that changed with WASHplus. While integration often occurs across sectors, it also happens systemically, across different levels of a system—national, district, and community. Physical integration—placing people from different sectors in the same space—can help to motivate or spur change.
An additional important integration pathway is planned vs. opportunistic integration. In many countries, WASHplus planned the integrated activities, joining different sectors to facilitate change.

Integration Continuum

WASHplus has articulated the concept of integration on a continuum, providing terminology to describe and facilitate integration. On one end of the continuum is **co-location**, in which sectoral programs deliberately locate in the same geographic area, reaching the same (vulnerable) target beneficiaries. The mid-point of the continuum is sectoral programs that **share tools and approaches**, which heighten collaboration and communication between sectors. At the other end of the continuum, sectoral programs **work deliberately together to plan**, budget, and implement joint programming in two or more sectors. At this final stage the different sectors recognize the value to each sector of integrating and embrace the potential for an even higher level outcome than sectors could attain separately.

In addition, WASHplus integrated across different levels of the system. At the national level WASHplus reviewed and strengthened policy, programming guidance, capacity, and monitoring.

The project also ensured that activities took place at the household and community levels, often through USAID nutrition implementation partners and government cadres working at the local level.

WASHplus also shared its country experience with global actors and partnered with different efforts to advance nutrition-WASH integration. The project integrated WASH into the Nutrition, Assessment, Counseling and Support (NACS, systems approach to providing the nutrition standard of care for all individuals[viii]) policies and training materials; developed the WASH-nutrition joint USAID, UNICEF, and WHO document; and participated in a number of international fora, among other global level activities. WASHplus experience shows there is no one formula for integrating WASH and nutrition, but the steps (at right) are based on its country-level activities in Uganda, Mali, Bangladesh, and other settings.
This toolkit is a compendium of WASHplus tools and resources to facilitate WASH and nutrition integration at global and country level. It is organized topically and geographically.

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[i] Black R et al. 2013. Maternal and Child Undernutrition and Overweight in Low-Income and Middle-Income Countries. *The Lancet*. 382 (9890): 427–451.
[ii] Bhutta et al. 2008. What Works? Interventions for Maternal and Child Undernutrition and Survival. Maternal and Child Undernutrition Study Group. *The Lancet*. 371(9610):417-40.
[iii] Black R et al. 2013.
[iv] Humphrey. 2012. SHINE Sanitation, Hygiene, Infant Nutrition Efficacy Project (trial in Zimbabwe). Study proposal. 2012. http://clinicaltrials.gov/show/NCT01824940. Accessed April 27, 2014.
[v] Korpe P and W. Petri. 2012. Environmental Enteropathy: Critical Implications of a Poorly Understood Condition. *Trends in Molecular Medicine*. 18(6): 328-336.
[vi] Humphrey J. 2009. Child Undernutrition, Tropical Enteropathy, Toilets, and Handwashing. *The Lancet*. 374: 1032–1035.
[vii] Ngure et al. 2014. Water, Sanitation, and Hygiene (WASH), Environmental Enteropathy, Nutrition, and Early Child Development: Making the Links. *Annals of the New York Academy of Sciences*, Volume 1308, Every Child's Potential: Integrating Nutrition and Early Childhood Development Interventions, 118–128
[viii] For more on NACS, https://www.usaid.gov/what-we-do/global-health/nutrition/technical-areas/nutrition-food-security-and-hiv